STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MAY 11, 2007

Prepared on March 30, 2007

ITEM NUMBER:

14

SUBJECT:

Status Report, Scotts Valley Dry Cleaners, 272-A Mount

Hermon Road, Scotts Valley, Santa Cruz County

KEY INFORMATION

Type of Discharge: Existing Orders:

Unauthorized Release of Tetrachloroethene (PCE) Cleanup or Abatement Order (CAO) No. R3-2005-0081

Monitoring and Reporting Program (MRP) No. R3-2005-0082 Waste Discharge Requirements Order No. R3-2006-0067 National Pollutant Discharge Elimination System (NPDES) Permit No. CAG993002 General Permit for Discharges of Highly Treated

Groundwater to Surface Waters

MRP No. R3-2006-0067

This Action:

Status Report Only

DISCUSSION

New information is shown in italics.

Water Board staff provides regulatory oversight of the Scotts Valley Dry Cleaners site in Santa Cruz County. The dry cleaner building is located on a property with other commercial buildings and a parking lot in Scotts Valley. The Scotts Valley Water District's Well No. 10 is located approximately 450 feet south of the dry cleaner building.

Background

In 1996, the Dischargers started site remediation of tetrachloroethene (PCE) initially by performing excavation (trenching) and vapor extraction in the source area. In March 1998, Water Board staff required the Dischargers to submit a corrective action plan. Since 1998, the Dischargers conducted several remediation pilot tests/interim remedial actions, including air sparging, aquifer pump testing, and injection of hydrogen releasing compounds and cheese whey. The Dischargers revised the corrective action plan several times based on pilot test results.

The Dischargers implemented high vacuum, dual-phase extraction in March 2004 for PCE plume containment. In July 2004, the Dischargers submitted a revised Interim Remedial Action Plan proposing additional groundwater monitoring and extraction well installations and a permanent groundwater extraction and treatment system.

The Water Board permitted the treated groundwater discharge from the proposed system under the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharge of Highly Treated Groundwater to Surface Waters on May 5, 2005. The groundwater extraction system was fully operational by August 10, 2005.

On May 25, 2005 the Water Board issued Cleanup or Abatement Order No. R3-2005-0081 (CAO) and Monitoring and Reporting Program No. R3-2005-0082 to the Dischargers. CAO No. R3-2005-0081 required the Dischargers to commence operation of a groundwater extraction system, submit a work plan to install wells to further investigate the contamination off-site, and submit a corrective action plan according to our Executive Officer's schedule.

Our subsequent July 19, 2006 letter required implementation of both proposed off-site and on-site investigative work, report submittal summarizing the investigative work, submittal of an updated site conceptual model, submittal of a more detailed pilot study work plan, and repair or destruction and replacement of the missing/damaged monitoring wells. By October 31, 2006, Secor submitted a cluster well installation report, a third quarter monitoring report, and a pilot test work plan.

In October 2006, the Scotts Valley Water District's Well No. 10 failed. The Water District believes the well casing may have corroded, causing the filter pack to enter the well. According to discussions with the Scotts Valley Water District, the Water District is limited to the same location for a replacement well.

Recent Progress

The Fourth Quarter 2006 groundwater monitoring report indicates that the deep-zone sentry well (MW-13B) continues to contain no PCE and the pump and treat system appears to be containing the plume. The most recent (December 2006) concentrations of PCE in groundwater ranged from less than 0.5 ppb (non-detect) to 1,300 ppb. The deeper-zoned monitoring well (MW-22A), screened from 82 to 87 feet below ground surface (bgs), contained PCE at 110 parts per billion (ppb) in a groundwater sample taken on December 12, 2006. During Third Quarter 2006, a groundwater sample from the well contained 140 ppb PCE. Continued monitoring of this well, for at least one additional quarter, should determine whether the PCE persists in the deeper zone or if the drilling process dragged PCE down.

On February 7, 2007, we approved the chemical oxidation pilot test work plan, with a few conditions. The Dischargers will inject potassium permanganate solution into MW-4 and monitor nearby monitoring wells to evaluate effectiveness. Our letter requires the Dischargers to submit quarterly progress reports starting on October 30, 2007. Our letter also requires the Dischargers to submit a proposal for a Correction Action Plan in their final pilot test report due July 30, 2008.

Our February 13, 2007 letter modified a few monitoring requirements to require quarterly sampling of MW-13A, quarterly sampling of MW-13B while the municipal Well No. 10 is not pumping, and no further sampling of the Valley Garden's Golf Course Well. In addition, our letter requires the Dischargers to rehabilitate several monitoring wells (which have filled with fine-grained sediment at the bottom) and report completion of these activities in their April 30, 2007 quarterly monitoring report.

On February 27, 2007, Secor requested an extension on submittal of a site conceptual model (SCM) report (due March 1, 2007) because they wanted to incorporate the recent groundwater data from MW-23 and from recently rehabilitated monitoring wells. Our March 5, 2007 letter revised the due date for the SCM report to April 6, 2007.

As reported in Secor's March 1, 2007 deep-zone monitoring well completion report, the Dischargers completed the deep-zone monitoring well (MW-23) by February 1, 2007. The monitoring well is screened from 279 feet bgs to 319 feet bgs in the uppermost section of the

Lompico aquifer and is designed to act as a sentry well to the Scotts Valley Water District's Well No. 10. The Dischargers developed MW-23 and collected a groundwater sample on February 21, 2007. The groundwater sample did not contain detectable concentrations of any contaminants. The Dischargers are required to sample groundwater in MW-23 on a monthly basis.

The Water District is planning to have their replacement municipal well (Well 10A) operational in time to meet summer peak water supply demand. The Water District has proposed that the replacement Well 10A will be screened in the Lompico formation and operate at a peak flow of 400 gallons per minute. Until the replacement Well 10A is operational, the Water District may potentially use the damaged Well 10. The Dischargers are required to increase sentry well sampling frequency to monthly once Well 10 or replacement Well 10A begins pumping.

Future Board Updates

Since we will not receive any chemical oxidation pilot test data until October 30, 2007, we plan to provide our next Water Board status update at the December 7, 2007 meeting. If we receive any data showing a major change in site conditions before then, we will provide an update at either the September 7, 2007 or the October 19, 2007 Water Board meeting.

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